Quan Do

Amherst, MA | qmdo@umass.edu | (669) 369-9547 | https://www.linkedin.com/in/quan-m-do/

EDUCATION

University of Massachusetts Amherst | Amherst, MA **Anticipated May 2026**
Bachelor of Science in Computer Engineering with minor in **Mathematics** | **GPA:** 3.84 (Dean's List)
Relevant Courses: Embedded Systems, Artificial Intelligence, Data structures, Algorithms, Systems Programming, Computer Networking, Circuits & Electronics, Hardware Organization & Digital Design, Linear Algebra

TECHNICAL SKILLS

Programming: C, C++, Python, Assembly, Bash, JavaScript, TypeScript, HTML/CSS, SQL, Node.js, Express
Electrical and Electronic Engineering: MATLAB, Verilog, Simulink, KeilC
Tools and soft skills: Git, GitHub, Microsoft Office, Jira, Leadership, Problem-solving, Teamwork, Communication

WORK EXPERIENCE

Computer Support Technician | UMass EdTech | Amherst, MA **May 2025 - Present**
- Provided hardware/software troubleshooting to 150+ faculty, staff, and students monthly via Jira, achieving a 96% resolution rate within agreed response times and ensuring clear communication
- Built Power BI dashboards, integrated Qualtrics with Power Automate, and automated workflows, reducing reporting time by 40% and improving operational efficiency

Embedded Software Engineer Intern | FPT Software | Ho Chi Minh City, Vietnam **June 2024 - August 2024**
- Developed AUTOSAR-compliant systems in C using the S32K144 EVB and KeilC, optimizing LPUART interfaces (9600/19200 baud) for 100% communication accuracy
- Integrated Systick timer for interrupt-driven scheduling, reducing latency by 25% and ensuing real-time performance in automotive system
- Led a 5-week project, implementing GPIO, clock peripherals, and timers, achieving 30% faster development while delivering a scalable prototype ahead of schedule

Software Engineer Intern | Infina (YC S21) | Ho Chi Minh City, Vietnam **May 2023 - August 2023**
- Built a high-performance API backend with Node.js, TypeScript, GraphQL, and Express, handling 1,000+ requests/second and tripling order throughput with sub-50ms response times for over 500,000 investors
- Implemented data validation rules, reducing user errors by 30% and ensuring full validation of phone numbers and unique 5-digit savings codes for 100% data integrity
- Enhanced code quality with TypeScript and TSDoc, enabling a 4-engineer team to release monthly upgrades

PROJECTS

Typing Speed Test Web Application | Personal Project **April 2024 – Present**
- Developed a web app with HTML, CSS, and JavaScript to fetch random quotes from the Advice Slip API and track typing speed with a 95-98% accurate WPM calculator
- Deployed the interactive typing test on Netlify, integrated with GitHub for version control, ensuring smooth updates and easier management of the project

Distance Measurement System | Final Project **May 2024**
- Engineered an embedded system using the HC-SR04 ultrasound sensor and ATmega328P microcontroller to measure object distances with 98% accuracy, displaying results on a 4-digit 7-segment display
- Implemented in C, utilizing timer interrupts to calculate distances based on clock cycles and optimized digit persistence to display results within 50ms, improving measurement precision

Temperature Monitoring System | Personal Project **April 2024**
- Designed an embedded system to monitor and display temperature readings from the TMP36 sensor with 95% accuracy, using the ATmega328P microcontroller. Results were shown on an OLED and transmitted via UART
- Implemented in C, using ADC for sensor readings and controlled an LED to indicate temperature ranges. Optimized button input to switch between Celsius and Fahrenheit displays

2048 Game | Personal Project **March 2023**
- Constructed an interactive terminal-based 2048 game using Python and the Curses library, featuring core mechanics like tile merging, board compression, and randomized tile insertion
- Designed an intuitive UI with arrow keys and W/A/S/D support, displaying real-time scores and providing dynamic feedback, including end-game alerts and instructions